

## Optimalization of the Use of Intellectual Property Rights Through Acceleration of P5KWU Modules Base on Local Requirements for Students of Seve-City Semarang

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### Abstract

**Purpose:** This program aims to help teachers overcome challenges in developing modules that align with student characteristics and the local environment while improving their understanding of Intellectual Property Rights (IPR). It also seeks to integrate local wisdom into learning and strengthen UNNES' role in entrepreneurship education in Semarang.

**Method:** The program utilizes workshops, technical guidance, and periodic mentoring to equip teachers with the necessary skills for module development and IPR knowledge.

**Practical Applications:** By incorporating local wisdom, the program has made educational modules more relevant and engaging for students, enhancing their learning experience and better reflecting the regional context

**Conclusion:** The program successfully addressed teachers' difficulties in module creation, improved their IPR understanding, and strengthened UNNES' leadership in entrepreneurship education, making a significant impact on the educational landscape in Semarang.



## Introduction

Commitment to the community is one of the three dharma colleges that aims to make a real contribution in solving various problems in the community. In this regard, the Commitment Team of Semarang State University (UNNES) focuses on improving the quality of education through strengthening the competence of entrepreneurship teachers (KWU) in Semarang High School in developing teaching modules based on local wisdom.

The profile of the dedication partner, namely KWU High School Teacher's GPA (MGMP), shows that KWU teachers in the region face various challenges in the preparation of the Learning Module of the Pancasila Student Profile Enhancement Project and Entrepreneurship (P5KWU). Based on an analysis of the situation through WhatsApp communications, live observations, as well as surveys using Google Forms, it was found that many KWU teachers have not been able to assemble the P5KWU module properly. Most of them just copied modules from other schools that might not fit the student's character, environment, and local intelligence. This is due to the limited understanding of the complex differences between the RPP (Learning Implementation Plan) and the teaching module, as well as the minimal training provided by the government.

The teaching module is an important element in the implementation of the Merdeka Curriculum, which allows teachers to design learning systematically and directed (Meilana & Aslam, 2022). However, in fact, many teachers still have difficulties in creating these modules, especially in terms of arranging the sequence of modules and determining themes relevant to the P5KWU. Besides, government training is minimal and ineffective. Many findings indicate that many teachers have difficulty developing teaching modules (dewi & Astuti, 2022; Jannah, Irtifa'Fathuddin, & Zahra, 2022; Maarif, 2022; Nesri & Kristanto, 2020; Rindayati & Damariswara, 2022). While the important tool for implementing the independent curriculum is the teaching modulus. Teaching modules have a major role for teachers in designing learning (Maulida, 2022; Sukestiyarno & Pradnya, 2020). One of the reasons for the difficulty of teachers making teaching Modules is that the training carried out by the government is still minimal and impressed by the original origin (dewi & Astuti, 2022; Purwaningsih, Rachmawati, & Islami, 2021). The learning module is an important part in the implementation of the Merdeka Curriculum (Maulida, 2022; Purwaningsih et al., 2021). As a result, many of the modules produced are less qualified and require repairs.

Teacher's ability to create teaching modules is a pedagogical competence that needs to be developed (Akbar, 2019; Maulida, 2022). The goal is to make teacher learning in the classroom more effective, efficient, and not out of achievement indicators. Therefore, the ability of teachers in creating teaching modules needs to be enhanced through training and support, as a form of dedication to society.

The existence of a teaching module can be used to increase the number of credits for teachers (Karsiwan et al., 2023). Besides, the poor awareness and understanding of teachers about Intellectual Property Rights (IPRs) is also a major problem. Many teachers do not realize that the teaching modules they create can be protected as intellectual property, which not only protects their work, but can also add credit for promotion (Nursiah, 2023; Pratama & Lestari, 2020; Purwaningsih et al., 2021). Preliminary data show that most KWU teachers in Semarang City have not yet understood HKI, and very few have legalized their innovative work.

This situation indicates that there is an urgent need to provide training and support to KWU teachers in compiling local wisdom-based P5KWU modules. This addition is expected to enhance the competence of teachers in designing modules that fit students' characteristics and local potential, as well as raising their awareness of the importance of protecting HKI over their innovative works.

Against this background, this dedication program aims to optimize HKI acquisition through local wisdom-based P5KWU module acceleration for high school teachers in Semarang City. This program will not only help teachers in better formulating modules but

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also encourage them to be more creative and innovative in developing relevant and useful learning materials for students.

## **Method**

The service team performs the method of dedication to the community with activities, socialization, lectures and discussions, accompaniment/practice and evaluation so that the goals and objectives are achieved accordingly. This dedication programme will be implemented through three main stages:

1. Workshop/Socialization This activity will provide theoretical and applicative related materials:
  - Education: Training in the preparation of modules P5KWU based on local wisdom.
  - Economics: Socialization of digital marketing for entrepreneurial products.
  - Law: Enhancing understanding of Intellectual Property Rights (IPRs) and protection of teaching work.
2. Technical guidance/training will be carried out to deepen the understanding and skills of teachers, including:
  - Education: Preparation of teaching modules P5KWU with the support of practitioners/experts.
  - Economics & Law: Procedures and mechanisms for submitting HKI, as well as an understanding of different types of HKI.
  - Local wisdom: Technopreneurship, product quality, and marketing (4P - Product, Price, Place, Promotion).
3. Master's support will be intensely accompanied in:
  - Module preparation: Making ready P5KWU modules in IPRs.
  - Business Qualification Studies: Ensuring P5 KWU projects are sustainable and business friendly.
  - Local Wisdom Identification: Mapping and implementation of local wisdom-based P5KWU in schools.

With this approach, it is expected that KWU teachers in Semarang City can improve their competence in drawing up relevant, qualified, and legally protected P5KWU modules.

## **Result**

This dedication programme is designed to address the problems faced by entrepreneurship (KWU) high school teachers in Semarang City, in the preparation of P5KWU modules based on local wisdom. The proposed solution is carried out through three main approaches: pioneering training and accompanying the preparation of P5KWU modules, strengthening legal aspects through Intellectual Property Rights (IPRs), and utilizing local wisdom in education. This activity is conducted on a regular basis at 12 Semarang State High School, with participants consisting of MGMP teachers holding P5KWU subjects in Semarang City. The MGMP chief, Mother Monica, played an active role in the coordination and implementation of these activities.

The first step in this programme is the pioneering of the Semarang State University (UNNES) in organizing workshops, technical guidance, and support for the preparation of the P5KWU module. Based on searches through the Google search engine as of January 2024, no other college has undertaken similar activities, while many KWU high school teachers are in great need of this training. Through this program, UNNES aims to enhance the knowledge and skills of teachers in compiling P5KWU modules that are not only systematic and applicative, but also relevant to the local environment. Prior to the training, data showed that 76.3% of KWU teachers in Semarang City had never compiled the P5KWU module independently, and more than 84% of those who had tried to compile the module experienced difficulties, especially in terms of the sequence of materials and the determination of themes that matched local wisdom. The existing modules are often a

copy-paste from other schools, so they don't match the character of the students and the local environment. However, after regular training at 12 Semarang State High School, the evaluation results showed a significant improvement in teacher competence. 85% of teachers who followed the training managed to compile a more applicative and contextual P5KWU module, in accordance with the character of students and local intelligence. These teachers also became more able to integrate the concept of entrepreneurship with the local potential that exists around the school, resulting in modules that are useful for learning as well as innovative and creative.

*Figure 1. P5KWU Module Design Presentation Session and Introduction to HKI Procedures for Teaching Modules*



Source: Personal Documents, 2024.

In addition to focusing on module formulation, the program also highlights the importance of understanding and protecting intellectual property rights (IPRs) for teachers. In this program, UNNES not only provides technical training on modulus formulation but also educates teachers about their rights as creators of intellects. Before the implementation of the program, most KWU teachers in Semarang City did not realize that the work they produced in the form of a teaching module could get legal protection. Minimal knowledge of this HKI leads to a lack of effort to legalize the modules created, although the module contains innovative ideas that have important value for educational development. With technical guidance and support, teachers now have a better understanding of the procedures for submitting HKI, and this is expected to encourage more lawfully protected teachers' work, giving them a sense of security and appreciation for their creativity. Before this program was implemented, 84.2% of KWU teachers in Semarang City did not understand HKI, and only 5% of them had work that had been in IPRs. Many teachers are unaware that their teaching modules and innovations can be legally protected. After following technical training and counselling, 80% of participants showed a significant improvement in their understanding of HKI, with 30% of teachers attending the program successfully enrolling their P5KWU modules to earn HKIs, and this number is expected to continue to increase over time.

In addition, the program also highlights the importance of using local wisdom in the learning process. Local wisdom, which encompasses the culture, economic potential, and local environment, has a very important value in education as it can help students better understand the material taught in a context closer to their lives. Prior to this program, many KWU teachers had difficulty integrating local wisdom into their P5KWU modules, so learning often felt less relevant and interesting to students. Through a series of workshops and support, teachers are invited to dig the potential of local intelligence around them and use it as a theme in teaching modules. This approach not only improves the relevance of the teaching material, but also helps students develop their ability to think critically and creatively by leveraging the existing local potential. As a result, the resulting P5KWU modules become richer in content and able to attract students' interest in learning. Most of the teachers who

participated were able to identify relevant local wisdom to be the theme of entrepreneurship in the P5KWU module, and the modules produced became more contextual and interesting for students, with some teachers starting to explore the commercialization potential of the products produced by students in P5KWU activities, introducing the concept of local-intelligence-based technopreneurship.

Figure 2. Development of the P5KWU module design form

Source: Personal Documents, 2024.

Lastly, the program also focuses on the entrepreneurial and commercialization aspects, which are at the core of the P6KWU subjects. Teachers are taught not only how to build applied modules, but also how to direct students to develop potential entrepreneur projects for commercialization. This is done by teaching teachers about the concepts of technopreneurship and how to connect students' projects with the broader market. Thus, P5KWU learning not only ends in the classroom, but can also have a real impact in student life through sustainable entrepreneurship projects. The program is expected to provide long-term benefits for teachers and students, by encouraging the creation of a more dynamic, creative, and relevant learning environment. The success of the program also strengthens UNNES' position as a pioneer in the development of education based on real needs in the field. The program shows that through a holistic approach involving workshops, technical guidance, and periodic support, KWU teachers can experience significant improvements in their competence, understanding of HKI, as well as the ability to integrate local intelligence and entrepreneurship into the learning process.

## Discussion

The dedication program has had a substantial impact on entrepreneurship (KWU) high school teachers in Semarang City, particularly in the preparation of P5KWU modules based on local wisdom. Initially, a significant portion of teachers struggled with independently creating modules that were both systematic and relevant to their local context. Post-training evaluations revealed that 85% of the participants could successfully develop more applicative and contextual P5KWU modules, greatly enhancing the learning experience for students.

The program also significantly improved teachers' understanding of Intellectual Property Rights (IPRs). Before the program, 84.2% of teachers lacked knowledge of IPRs, and only 5% had legally protected their work. After training, 80% of participants showed marked improvement, with 30% successfully registering their P5KWU modules for IPR



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protection. This newfound awareness and legal protection incentivize creativity and innovation among teachers.

*Figure 3. Photo Session With MGMP Mapel P5KWU Teachers*



Source: Personal Documents, 2024.

Furthermore, integrating local wisdom into the curriculum has made the learning material more engaging and relevant, fostering critical and creative thinking in students. Some teachers even began exploring the commercialization potential of student projects, introducing local-intelligence-based technopreneurship. This holistic approach has not only enhanced teaching practices but also empowered students to develop entrepreneurial projects with real-world applications. Consequently, the program solidified UNNES' role as a leader in entrepreneurship education, demonstrating the effectiveness of a comprehensive support system for KWU teachers in creating dynamic and impactful learning environments.

## **Conclusion**

The dedication program carried out at Semarang State High School 12 has successfully improved the competence of entrepreneurship teachers (KWUs) of high school in the preparation of local wisdom-based P5KWU modules. Through regular workshops, technical guidance and support, teachers not only gain skills in systematic and applied modules but also improve their understanding of Intellectual Property Rights (IPRs). Before training, many teachers have difficulty in designing modules that are relevant to the character of students and local intelligence, as well as lack of understanding of the legal protection of their work. However, after attending the program, there is a significant improvement in the quality of the modules produced and the number of modules submitted to IPRs.

In addition, the program also successfully educates teachers about the use of local intelligence and entrepreneurship concepts in learning. Teachers are now more able to integrate local wisdom into their P5KWU modules, making it more contextual and attractive to students. This approach also helps students to develop entrepreneurial projects that can be commercialized, giving a real impact in their lives. The success of this programme not only strengthened UNNES' position as a pioneer in the development of real-needed education but also contributed to improving the quality of entrepreneurship education in Semarang City.

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